

June 1 - June 7, 2001

The Terra spacecraft is operating in nominal mode. All instruments are in nominal science mode with the exception of MOPITT, which has been in Standby Mode since experiencing a cooler system displacer anomaly on May 7, 2001.

Tests were performed on the MOPITT instrument this week in an attempt to finalize the compressor and displacer amplitude settings at which the instrument would be run, so that MOPITT operations could be resumed on the A side. However, the non-functional displacer on the B side reacted to the compressor motion in an unexpected manner, and testing was terminated. Additional tests and consultation with hardware vendors are going to be required to fully diagnose this anomaly and develop a viable plan to resume operations. A short-term task with Lockheed Martin Palo Alto will be put into place to acquire vendor assistance to help diagnose the anomaly and recommend a course of action.

The Terra Solid State Recorder (SSR) anomaly has been isolated to wiring firmware affecting two supersets (30 and 31) in the MODIS buffer. These supersets were re-allocated to the SSR free space and all subsequent MODIS dumps were nominal. Although the actual cause is not understood, the entire SSR is now behaving normally and propagation of the anomaly appears unlikely. MODIS is the most challenging SSR buffer to manage as a result of the instrument's data acquisition rates; the loss of two supersets has made management of MODIS even more challenging. Negotiations will be undertaken with the other instruments to identify one or two supersets to reallocate to MODIS to ease the strain on MODIS SSR operations.